

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (Canceled).
2. (Canceled).
3. (Canceled).
4. (Currently Amended) A communication apparatus ~~according to claim 1~~

connected to a communication channel, comprising:

a voice coding unit for code-compressing a voice signal inputted and thereby generating voice information,

a DTMF detecting unit for detecting a DTMF signal from said voice signal,

a DTMF coding unit for, when this DTMF detecting unit has detected a DTMF signal, coding this DTMF signal into a specified form and thereby generating DTMF information,  
and

an information outputting unit for outputting the voice information generated by said voice coding unit and/or the DTMF information generated by said DTMF coding unit to said communication channel,

wherein:

said DTMF information has a header portion indicating destination information and a payload portion containing DTMF code information indicating the code of said DTMF signal and signal detecting time information indicating the time of detecting this DTMF signal.

5. (Original) A communication apparatus according to claim 4, wherein:

said DTMF detecting unit has a measuring unit for measuring the signal detecting time of said DTMF signal and an analyzing unit for analyzing the code of said DTMF signal, and

said DTMF coding unit, when said DTMF signal has been detected continuously for a predetermined time or longer, generates said signal detecting time information on the basis of the result of measurement of said measuring unit, generates said DTMF code information on the basis of the result of analysis of said analyzing unit, and generates said DTMF

information including these signal detecting time information and ~~DTM~~ DTMF code information.

6. (Canceled).

7. (Canceled).

8. (Currently Amended) A communication apparatus ~~according to claim 6~~ connected to a communication channel, comprising:

a voice decoding unit for generating a voice signal by decoding code-compressed voice information contained in received information received from said communication channel,

a DTMF information detecting unit for detecting that said received information is DTMF information,

a DTMF decoding unit for, when this DTMF information detecting unit has detected DTMF information, decoding this DTMF information and thereby generating the content of DTMF,

a DTMF signal generating unit for generating a DTMF signal on the basis of the content of DTMF generated by this DTMF decoding unit, and

a voice outputting unit for outputting a voice signal generated by said voice decoding unit or a DTMF signal generated by said DTMF signal generating unit,

wherein:

said DTMF information has a header portion indicating destination information and a payload portion containing DTMF code information indicating the code of said DTMF signal and signal detecting time information indicating the signal detecting time of this DTMF signal.

9. (Original) A communication apparatus according to claim 8, wherein:

said DTMF decoding unit decodes said DTMF information and generates the content of DTMF including said DTMF code information and signal detecting time information, and

said DTMF signal generating unit generates said DTMF signal on the basis of DTMF code information and signal detecting time information of the content of DTMF generated by said DTMF decoding unit.

10. (New) A communication apparatus comprising:  
a voice coding unit for code-compressing a voice signal inputted and thereby generating voice information,  
a DTMF detecting unit for detecting a DTMF signal from said voice signal,  
a DTMF coding unit for, when the DTMF detecting unit has detected a DTMF signal, coding the DTMF signal into a specified form and thereby generating DTMF information,  
an information outputting unit for outputting the voice information generated by said voice coding unit or the DTMF information generated by said DTMF coding unit to a communication channel, and  
a DTMF signal termination notifying unit for transmitting information indicative of termination of sending the DTMF signal from the DTMF coding unit to the communication channel, together with the DTMF information.

11. (New) A communication apparatus comprising:  
a voice decoding unit for generating a voice signal by decoding code-compressed voice information contained in received information received from a communication channel,  
a DTMF information detecting unit for detecting that said received information is DTMF information,  
a DTMF decoding unit for, when the DTMF information detecting unit has detected DTMF information, decoding the DTMF information and thereby generating the content of DTMF,  
a DTMF signal generating unit for generating a DTMF signal on the basis of the content of DTMF generated by this DTMF decoding unit,  
a voice outputting unit for outputting a voice signal generated by said voice decoding unit or a DTMF signal generated by said DTMF signal generating unit, and  
a silence signal generating unit for generating a silence signal or a noise signal before or after sending the DTMF signal transmitted by the voice output unit and thereby sending the generated silence signal or noise signal to a voice terminal apparatus.

12. (New) A communication apparatus according to claim 11, wherein:  
said DTMF decoding unit decodes said DTMF information and generates the content of DTMF including said DTMF code information and signal detecting time information, and

said DTMF signal generating unit generates said DTMF signal on the basis of DTMF code information and signal detecting time information of the content of DTMF generated by said DTMF decoding unit.

13. (New) A communication apparatus comprising:

a voice coding unit for code-compressing a voice signal inputted and thereby generating voice information,

a DTMF detecting unit for detecting a DTMF signal from said voice signal,

a DTMF coding unit for, when the DTMF detecting unit has detected a DTMF signal, coding the DTMF signal into a specified form and thereby generating DTMF information,

an information outputting unit for outputting the voice information generated by said voice coding unit or the DTMF information generated by said DTMF coding unit to a communication channel,

a DTMF signal termination notifying unit for transmitting information indicative of termination of the DTMF signal sent from the DTMF coding unit to the communication channel together with the DTMF information,

a voice decoding unit for generating a voice signal by decoding code-compressed voice information contained in received information received from the communication channel,

a DTMF information detecting unit for detecting that said received information is DTMF information,

a DTMF decoding unit for, when the DTMF information detecting unit has detected DTMF information, decoding the DTMF information and thereby generating the content of DTMF,

a DTMF signal generating unit for generating a DTMF signal on the basis of the content of DTMF generated by this DTMF decoding unit,

a voice outputting unit for outputting a voice signal generated by said voice decoding unit or a DTMF signal generated by said DTMF signal generating unit, and

a silence signal generating unit for generating a silence signal or a noise signal before or after transmittance of the DTMF signal sent by the voice output unit, when information indicative of termination of the DTMF signal is detected by the DTMF signal termination

notifying unit, and thereby sending the silence signal or the noise signal to a voice terminal apparatus together with the DTMF information detected by the DTMF information detecting unit.